

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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DEC - 4 1998

In the Matter of )  
)  
Revision of the Commission's Rules ) CC Docket No. 94-102  
to Ensure Compatibility with ) RM-8143  
Enhanced 911 Emergency )  
Calling Systems )

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

To: The Commission

**PETITION FOR WAIVER**

Texas RSA 1 Limited Partnership d/b/a XIT Cellular ("XIT"), by its attorneys, hereby petitions the Federal Communications Commission for a waiver of the requirements of Section 20.18(c) of the Commission's Rules, 47 C.F.R. §20.18(c). To the extent that XIT will be unable to meet the December 31, 1998 deadline for compliance with the requirements of Section 20.18(c), concerning the transmission of "911" emergency calls made from TTY devices using digital wireless systems,<sup>1</sup> XIT files this waiver request in accordance with the procedures established therefor.<sup>2</sup>

XIT is a small cellular company serving approximately ten thousand subscribers in the Texas Panhandle. To accommodate the requirements of a limited number of subscribers, XIT has deployed two channels per cell site TDMA digital overlay; the remainder of its system is analog. Only 30 current subscribers access digital signals via dual-mode handsets. XIT's

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1 In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket 94-102, RM- 8143, Order, DA 98-2323, rel. Nov. 13, 1998 ("E911 Order").

2 Id.

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system supports TTY access to 911 over its analog facilities. With regard to digital calls, XIT's vendor, Nortel, has indicated that equipment using the TDMA interface may be capable of transmitting 911 calls, depending on the type of vocoder used in the system, the type of text message equipment used, and the type of handset used.<sup>3</sup> In the event that callers experience difficulty with TTY access on digital handsets, XIT notes that a dual-mode handset may be switched from the digital to the analog mode where TTY access may be supported. Given the conditional nature of its vendor's response, XIT, in an abundance of caution, seeks waiver of the December 31, 1998 deadline.

Good cause exists for waiver. The Commission recognizes the difficulty in meeting the current timetable for compliance with the 911 TTY requirements of Section 20.18(c), and also recognized that carriers operating digital wireless systems will not be able to come into compliance with the requirements of Section 20.18(c) absent the development and deployment of equipment technically capable of performing the required functions.

In accordance with the requirements for waiver of the December, 1998 compliance deadline,<sup>4</sup> XIT provides the following information:<sup>5</sup> XIT is undertaking steps to provide users of TTY devices with the capability to operate such devices in connection with digital wireless

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3 See attached letter from Nortel's Carol Banks to XIT's Darrell Dennis.

4 E911 Order at para. 11.

5 See attached Declaration of Darrell Dennis, XIT's Assistant General Manager. The Declaration bears a facsimile signature. The original Declaration will be filed with the Commission upon receipt by counsel.

phones. XIT has made all upgrades available to its TDMA overlay,<sup>6</sup> and continues to work with its vendor, Nortel, regarding compatibility of TTY equipment with digital facilities. XIT is wholly dependent upon its equipment vendor with respect to ensuring 911/TTY access over its digital facilities and intends to deploy the Nortel equipment necessary for this functionality. XIT will also continue to monitor the availability of possible 911/TTY access solutions from third parties.

To the extent that equipment upgrades are necessary, XIT will take all due steps to implement 911/TTY access solutions. Specifically, when Nortel announces the availability of any upgrade necessary to ensure 911/TTY access capability, XIT will place an order for such equipment or upgrade. According to usual practice, Nortel ships new equipment and upgrades to XIT within eight weeks of the placement of an order. Immediately upon receipt of available TTY equipment, XIT will commence installation which, typically, is completed within ten days. Following installation, XIT will test the new equipment or upgrade for a two-week period prior to deployment. XIT therefore estimates that a total of twelve weeks will elapse between ordering and service availability.

XIT has taken the following steps to address the consumer concerns referenced in the Commissions September 30, 1998 Order in this proceeding: XIT notes that each of the consumer concerns listed in the Appendix to the September 30 Order reference equipment. XIT remains committed to customer service, including addressing any concerns regarding access to 911 services via TTY devices. As a retail outlet for wireless equipment, XIT will

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6 XIT has upgraded its system with the latest version of the Nortel 13 bit vocoder.

continue to work with consumers to educate them regarding equipment availability and features and assist customers with speech and hearing disabilities in locating conforming equipment. In addition, XIT has notified all of its customers by a bill insert and also has instructed its sales personnel to advise its customers about this issue.<sup>7</sup>

Based on the foregoing, good cause exists for waiver of Section 20.18(c) of the Commission's Rules in accordance with the timetable set forth herein.

Respectfully submitted,

Texas RSA 1 Limited Partnership  
d/b/a XIT Cellular

By Sylvia Lesse Marci  
Sylvia Lesse  
Marci Greenstein

Its Attorneys

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202/296-8890

December 4, 1998

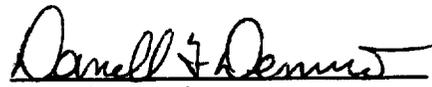
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<sup>7</sup> See attached XIT bill insert.

**DECLARATION OF DARRELL DENNIS**

I, Darrell Dennis, Assistant General Manager of Texas RSA 1 Limited Partnership d/b/a XIT Cellular ("XIT"), do hereby declare under penalties of perjury that I have read the foregoing "Petition for Waiver" and the information contained therein regarding XIT is true and accurate to the best of my knowledge, information, and belief.

Date 12/3/98

  
Darrell Dennis  
Assistant General Manager

# **NORTEL NETWORKS**

*How the world shares ideas.*

December 2, 1998

Mr. Darrell Dennis  
Assistant General Manager  
XIT Communications  
P.O. Box 1432  
Dalhart, TX 79022

Dear Darrell,

This letter is in response to your request for Nortel Networks to provide support information for XIT Communications to file a waiver request with the FCC regarding the E911/TTY rules. This response is intended to give you insight into our direction on this issue. It is based on the best technical information we have available and upon what may be required by the FCC rule.

With regard to analogue calls through the Nortel Networks equipment supplied to XIT Communications, to the best of our knowledge, our equipment is capable of transmitting 911 calls from people with speech or hearing disabilities through means other than the mobile handset, as an example through use of Text Telephone Devices (TTY). However, as noted below, most TTYs (a/k/a TTDs) in use today have not been designed to connect with wireless handsets, and the 911 text message may be corrupted by the consumers' equipment. Further, Nortel Networks believes that without extensive testing of text messages over analogue systems, it is premature to assume all 911 calls will be received by the 911 call center essentially error free.

With regard to digital calls through Nortel Networks equipment using the IS-95 CDMA air interface, the equipment, in the short term, is likely to not be capable of transmitting the 911 call with sufficient error free text to elicit proper 911 response.

With regard to digital calls through Nortel Networks equipment using the IS-136 TDMA air interface, the equipment, in the short term, may be capable of transmitting the 911 calls with sufficient error free text to elicit proper 911 response, depending upon the type of vocoder used in the system, the type of text message equipment used, and the type of handset used.

Industry standards to support TTY operation in digital mode are not currently defined. Nortel Networks is working with other equipment manufacturers and carriers to define the required design standards needed to develop this service. History tells us that it typically takes twelve to eighteen months from the adoption of standards to the commercial availability of product. However, in this instance, if the TTY is to be a part of the phone path to send text messages for people with hearing or speech disabilities, then TTY manufacturers must work sincerely and cooperatively with wireless manufacturers to develop a workable standard. As technical TTY considerations must be considered for a good standard, the wireless industry cannot develop a good standard without technical assistance from TTY manufacturers. Nortel Networks consequently cannot project when a design standard will be in place. In the interim, consumers may wish to test placing text calls over the digital path, or set their handsets to transmit only in analogue mode for text message calls.

If the 911 call content is corrupted by the TTY consumer devices used by speech or hearing disabled users, Nortel Networks system equipment will not be able to correct the errors. Nortel Networks is aware that the vast majority of TTYs are not designed to connect to wireless handsets, and such lack of good connection frequently corrupts messages before they reach the system networks. There are some TTY equipment models that have connections that facilitate properly connecting handsets and the TTY, but we believe few are in use. As you are aware, Nortel Networks does not currently manufacture wireless handsets, and is unable to resolve this connectivity problem. In addition, Nortel Networks is not aware of any TTY that has been designed for its tones to be carried error free over digital vocoders designed for human speech. Therefore, the digital audio path is more prone to create text errors more frequently than text messages over analogue audio paths.

Complicating the task of providing text-messaging capability for those with hearing and speech disabilities, is the lack of standards in the TTY industry. The TTY has been the most used text message system for the hearing and speech disabled users covered by the FCC's 911 rule, but there does not appear to be a single solution that would work for all TTY devices in use. In addition to the TTY, consumers are using the Internet for sending and receiving text messages. Nortel Networks is aware that people with hearing and speech disabilities, increasingly use the Internet for communication, and the Internet may become a method for placing 911 calls into the future.

The wireless industry has been working with consumer representatives and TTY manufacturers in the TTY Forum for almost two years. Nortel Networks is hopeful that information sharing from this group and comprehensive testing will identify practical solutions that manufacturers can incorporate into system solutions. However at this time Nortel Networks believes that a person with hearing or speech disabilities may find it difficult to place a wireless 911 call with the TTY equipment that they use for wireline calls, and a solution for all TTY users is not achievable by 12-31-98.

I would appreciate the opportunity to further discuss this issue with you at your convenience.

Sincerely,

Carol Banks  
Nortel Networks Wireless Sales



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## ATTENTION TTY USERS

### Background

A TTY (also known as a TDD or Text Telephone) is a telecommunications device that allows people who are deaf, hard of hearing, or have speech or language disabilities to communicate by telephone. A TTY has a keyboard used to type a conversation, which then is transmitted as tones over a wired telephone line. The tones are translated to text that appears on a person's TTY screen.

### 911 and TTY Access Through Wireless Services

Federal law requires the telecommunications industry to provide a way for TTYs to communicate through wireless systems to make 911 calls. There are two types of wireless phones - analog and digital.

- **Analog Wireless Phones** - It is possible today to use some analog phones to place wireless calls with some TTYs.
- **Digital Wireless Phones** - It is not possible today to use a digital wireless phone reliably to call 911 with a TTY.

Research is being done to improve the ability of digital phones to work reliably with TTYs.

Some digital phones also can operate as an analog wireless phone. If you have questions concerning the capabilities of your wireless phone, please contact . . .

For more information, please contact your local wireless service provider.

**FAXED****interoffice  
MEMORANDUM**

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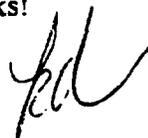
**To:** Customer Service Dept., Marketing Dept.  
**From:** Kathy L. Duggan  
Marketing Manager  
**Date:** October 22, 1998  
**Subject:** Bill Messages

Attached are the bill messages for the November 1 Billing. There is some very important information included in this month's bill messages. Please be sure and read each one so you'll be ready for questions if a customer should call in about them. Following is a brief description of what each one is about:

<b>Cellular</b>	<b>TTY or Text Telephone for the hearing impaired XIT is responsible for making sure this keyboard works with a cellular phone... (More information is attached than what is included with the bill message.)</b>
<b>XITNET</b>	<b>What is SPAMMING... &amp; what to do!...</b>
<b>XIT Rural</b>	<b>Important message from the PUC regarding 2 PIC changes on January 1, 1999... (LATA map included.)</b>
<b>CLEC</b>	<b>What is CRAMMING... &amp; what to do!...</b>

If you should have any questions, please feel free to ask!

Thanks!  
KD



KLD:ra

22/98

Panhandle Software Systems  
Bill Print Process  
News and Information

13:59:25

SERVICE TYPE 02 DALHART  
ATTENTION TTY USERS...  
A TTY (also known as a TDD or Text Telephone) is a telecommunications device that allows people who are deaf, hard of hearing, or have speech or language disabilities to communicate by telephone. A TTY has a keyboard used to type a conversation, which then is transmitted as tones over a wired telephone line. The tones are translated to text that appears on a person's TTY screen. Federal law requires the telecommunications industry to provide a way for TTYs to communicate through wireless systems to make 911 calls. It is possible today to use some analog phones to place wireless calls with some TTYs, but it is not possible to use a digital wireless phone reliably to call 911 with a TTY. If you have questions concerning the capabilities of your wireless phone, please contact your local XIT office.

Press CMD6 to Continue

CMD7 - Rate Plan Entry

CMD8 - Zip Code Entry

CMD12 - Previous Screen

CMD3 - Exit

CMD10 - Delete Message